

The Cambridge Handbook of Research Methods and Statistics for the Social and Behavioral Sciences

Volume 2

In a time where new research methods are constantly being developed and science is evolving, researchers must continually educate themselves on cutting-edge methods and best practices related to their field. The second of three volumes, this Handbook provides comprehensive and up-to-date coverage of a variety of issues important in developing, designing, and collecting data to produce high-quality research efforts. First, leading scholars from around the world provide an in-depth explanation of various advanced methodological techniques. In Part II, chapters cover general important methodological considerations across all types of data collection. In Part III, the chapters cover self-report measures. Part IV covers behavioral measures and their considerations for use. In Part V, various physiological measures are covered. The final part of the handbook covers issues that directly concern qualitative data collection approaches. Throughout the book, examples and real-world research efforts from dozens of different disciplines are discussed.

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Edited by John E. Edlund , Austin Lee Nichols
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The Cambridge Handbook of Research Methods and Statistics for the Social and Behavioral Sciences

Volume 2: Performing Research

Edited by

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or accuracy of URLs for external or third-party internet websites referred to in this
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remain, accurate or appropriate.

I dedicate this volume of the handbook to my family. Clark and Addison – you are both so amazing at everything you do and bring such joy into this world. I am glad to be raising such great humans. Adrienne – you are my everything. It is just that simple. You are AWESOME. I love the three of you with all of my heart!

John E. Edlund

I dedicate this book to all of our amazing authors without whom this would not have been possible. I also want to deeply thank my wife for continuing to support our efforts to better equip scientists to contribute to society through their research. Finally, I thank the earth for only rotating approximately every 24 hours because anything less just wouldn't provide enough time in the day.

Austin Lee Nichols

Contents

<i>List of Figures</i>	<i>page</i> x
<i>List of Tables</i>	xiv
<i>List of Contributors</i>	xvi
<i>Preface</i>	xix
Part I. Quantitative Data Collection Sources	1
1 Student Samples in Research	3
MICHAEL BASIL	
2 Mechanical Turk: A Versatile Tool in the Behavioral Scientist’s Toolkit	24
AARON J. MOSS, DAVID HAUSER, CHESKIE ROSENZWEIG, JONATHAN ROBINSON, AND LEIB LITMAN	
3 Social Media Research	48
ROSANNA E. GUADAGNO AND ALBERTO F. OLIVIERI	
4 Prolific: Crowdsourcing Academic Online Research	72
EYAL PEER	
5 Field Research	93
SHERRY JUEYU WU	
6 Organizational Research	116
VICTOR E. SOJO AND MELISSA A. WHEELER	
7 Integrating Culture in Research	140
BRIEN K. ASHDOWN AND ANGELA T. MAITNER	
8 Mixed Methods and Multimethod Research	163
JUDITH SCHOONENBOOM	
Part II. Important Methodological Considerations	187
9 Reliability	189
TENKO RAYKOV	

viii	Contents
10	Measurement Validity in the Social and Behavioral Sciences: Some “Whys” and “Hows” 211 JOHN J. SKOWRONSKI
11	Statistical Power: How Not to Miss What’s Right in Front of You 232 ERIN M. BUCHANAN
12	Interdisciplinary and Integrative Research 261 RICK SZOSTAK
13	The Importance of Replication 283 JON E. GRAHE AND KELLY M. CUCCOLO
14	The Inner Workings of Registered Reports 305 ZOLTAN DIENES
	Part III. Self-Report Measures 327
15	Self-Report Measures 329 TING YAN
16	Question and Questionnaire Design 352 SIERRA DAVIS THOMANDER AND JON A. KROSNICK
	Part IV. Behavioral Measures 371
17	Reaction Time Measures 373 JEREMY D. HEIDER
18	Eyetracking Research 398 ANJALI K. JOGESHWAR AND JEFF B. PELZ
	Part V. Physiological Measures 425
19	Measuring Hormones: Considerations for Biospecimen Collection, Assay, and Analysis 427 SHANNIN N. MOODY, AMALI I. STEPHENS, JENNY MAI PHAN, OLGA MIOCEVIC, AMITA KAPOOR, WEN WANG, ALLISSA L. VAN STEENIS, SCOTT LE, LOTTE VAN DAMMEN, AND ELIZABETH A. SHIRTCLIFF
20	Cardiovascular Measures for Social and Behavioral Research 455 MARY G. CAREY
21	Electrodermal Activity: Applications and Challenges 475 MD-BILLAL HOSSAIN, YOUNGSUN KONG, HUGO F. POSADA- QUINTERO, AND KI H. CHON
22	Surface Electromyography 497 JOSEPH S. BASCHNAGEL, MOET AITA, AND MICHAEL MCTIGHE

	Contents	ix
23 EEG and ERP	519	
CHRISTIAN PANITZ, RICHARD T. WARD, JOURDAN POULIOT, AND ANDREAS KEIL		
Part VI: Qualitative Data Collection Sources	545	
24 Open-Ended Survey Questions	547	
GLORIA FRASER		
25 Qualitative Archival Data: A Call to Creativity	571	
CONSTANCE JONES AND ANDREA WIEMANN		
26 Interviews: Processes, Strategies, and Reflections	591	
ZOË B. CORWIN AND JORDAN HARPER		
27 Case Studies: A Personal Account of Choices and Dilemmas	616	
CHRISTINE MEYER		
28 Focus Groups	640	
NOA AMIR, CHANDANA GUHA, SIMON CARTER, AND ALLISON JAURÉ		
29 Observational Data	665	
LESLEY BAILLIE AND SHANLEE HIGGINS		
<i>Index</i>	686	

Figures

2.1	The worker dashboard on MTurk. Each row represents a HIT that can be completed for pay.	<i>page</i> 26
2.2	The MTurk graphical user interface. This point-and-click system can be used to create several basic HITs.	27
2.3	Example code that can be sent to MTurk via API to execute actions like launching a HIT.	27
2.4	MTurk participant activity as a share of worker experience.	34
3.1	Retweets of messages related to the Black Lives Matter social movement. Light gray indicates IRA bots and trolls, dark gray the other retweets.	58
4.1	Number of participants and researchers on Prolific according to the year they joined.	74
4.2	Number of participants on Prolific by territory and year.	74
4.3a	Number of participants on Prolific by year and ethnicity.	75
4.3b	Number of participants on Prolific by year and gender.	75
4.3c	Percent of participants on Prolific by personal income level and year.	76
4.3d	Percent of participants on Prolific by age group and year.	76
4.4	Screenshots of the filtering dialog on Prolific before (left) and after (right) restricting to participants with approval rate of 98% or above.	78
4.5	Mean overall data quality score between sites and type of device used.	87
4.6	Replication (Cohen’s d) of three effects among the different samples and conditions.	88
8.1	Visualizing an emergent design: the sexual health education example.	173
11.1	Decision errors, power, and correct rejections for null hypothesis testing.	233
11.2	Study 1 illustrates two separate statistics classrooms each learning a different software to determine the influence of computer programs on final grades.	235
11.3	Study 2 illustrates a survey design where students’ data literacy is assessed to understand its relationship with future employment in data analytics.	235

	List of Figures	xi
11.4	A depiction of Study 3 that examines the implementation of gamification in a statistics classroom to improve data literacy.	236
11.5	The relationship between planned sample size and power in the correlation study measuring data literacy skills and future income.	238
11.6	The relationship between sample size planned, power, and effect size (the lines) for our correlation study measuring data literacy and income using $\alpha = .05$.	239
11.7	The relationship between sample size planned, power, and the α criterion for our data literacy correlation study where $r \sim .25$.	240
11.8	The relationship between sample size planned, power, and the type of research design if we could measure our study on statistics classrooms in both a between and repeated measures design.	241
11.9	A screen capture of G*Power for estimating the required sample size for the first study on statistics classrooms.	244
11.10	An estimation of prospective power (i.e., calculated before the study is conducted) for our first study on statistics classrooms using the same criterion as the previous power estimation but a specific sample size we know we can collect in the left-hand panel.	245
11.11	An estimation of sensitivity for our first study on statistics classrooms using the same criterion as the previous power estimation but a specific sample size we know we can collect in the left-hand panel.	246
11.12	Sample size estimation for Study 2 examining the correlation between data literacy and income.	247
11.13	The code used from the <i>pwr</i> library in <i>R</i> to estimate the sample size for the classroom comparison study.	248
11.14	The code used from the <i>pwr</i> library to estimate the sample size needed for the correlation study on data literacy and job income.	249
11.15	The code for simulating the data and estimating power for our repeated measures study on data literacy and gamification.	250
11.16	AIPE estimation code and sample size output from MBESS used to estimate the number of participants needed to find a d value between 0.10 and 0.50 (0.30 ± 0.20 width).	252
11.17	AIPE estimation code and sample size output for the correlation study.	253
11.18	The code for 95% power using the <i>pwr</i> package in <i>R</i> for our statistics classroom example.	253
11.19	The code for 95% power for the data literacy and job income correlation example.	254
11.20	The relationship between post hoc power and p -values for $r = .30$.	256
12.1	Influences on economic growth.	267
13.1	Replications of “Willow Sitting in Front of Piano.”	288
14.1	Biases that may arise from seeing data first.	307
14.2	How evidence counts against a theory	308

xii	List of Figures	
14.3	Picking a point in the multiverse.	313
17.1	Sample stimuli for the Stroop Color and Word Test (SCWT).	380
17.2	Sample stimuli for the Eriksen flanker task.	382
17.3	Sample procedure for the race-based evaluative priming task.	383
17.4	Visual example of the race-based Implicit Association Test.	384
18.1	Extraocular muscles.	400
18.2	Directions of eye movements.	401
18.3	Horizontal and vertical eye position as a function of time.	402
18.4	Smooth pursuit eye movement with “catch-up” saccades.	403
18.5	Vestibular-ocular response (VOR) eye movements.	403
18.6	Gaze orientation record for over one minute.	404
18.7	Tobii Pro Spectrum – Remote eyetracker mounted below computer monitor.	405
18.8	EyeGaze Edge – Remote eyetracker mounted below computer display.	406
18.9	Tower eyetracker (EyeLink 1000 Tower).	407
18.10	Positive Science – wearable eyetracker.	408
18.11	Tobii Pro Glasses 3 – wearable eyetracker.	408
18.12	Pupil Labs Invisible – wearable eyetracker.	409
18.13	Frame of output video from wearable eyetracker (Positive Science).	409
18.14	HTC Vive with integrated eyetracker (Pupil Labs).	410
18.15	Virtual environment.	410
18.16	Gaze on calibration board.	411
18.17	Average gaze location with 0.05° average precision and 0° (top) and 1° (bottom) inaccuracy.	412
18.18	Gaze locations with 0° average inaccuracy and high (top) and low (bottom) precision.	413
18.19	Accuracy and precision in eyetracker data.	413
18.20	Raw plots for drift and noise in gaze.	414
18.21	Plots showing fixations throughout a reading task.	416
19.1	Tasso device on upper arm.	430
19.2	Tasso collection and processing kit.	431
19.3	Hair sample processing.	432
19.4	Hair types.	433
19.5	Feces collection and processing.	435
19.6	ELISA assay process.	439
19.7	Liquid-chromatography mass spectrometry.	441
20.1	Heart rate variability.	459
20.2	An electrocardiogram.	460
20.3	ECG lead Mason-Likert configuration.	461
20.4	A novel 12-lead ECG patch with recorder, “QT ECG.”	468
21.1a	EDA data collection setup for laboratory environment.	477
21.1b	Examples of wearable EDA devices.	477
21.2	Morphology of typical skin conductance response (SCR).	478

	List of Figures	xiii
21.3	Decomposition of EDA into tonic and phasic components.	480
21.4	Motion artifact detection in EDA using machine learning method.	482
21.5	DCAE reconstruction of EDA signal B&W from MA-corrupted data (black).	483
22.1	Skeletal muscle anatomy.	499
22.2	Facial EMG electrode placement.	502
22.3	EMG signal measured from the orbicularis oculi muscle: (a) Raw EMG signal and (b) EMG signal after band pass filtering (28–500 Hz), rectification, and RMS integration.	505
23.1	Generation of the EEG signal.	520
23.2	EEG electrodes.	525
23.3	Examples of common artifacts in EEG data.	528
23.4	Event-related potential (ERP).	531
23.5	Spectrum and spectrogram.	535
24.1	Examples of the three most common types of OESQs.	548
24.2	Defining key survey terms.	558
24.3	Example debriefing sheet.	559
24.4	Example research recruitment posts.	561
24.5	Recruitment materials for the Rainbow Mental Health Support Experiences study.	561
24.6	Addition of an open-ended response to list of researcher-derived responses.	565
24.7	Example of an “any others comments” question.	566
26.1	Key steps in preparing for the interview.	594
27.1	Media articles covering the change processes in Statistics Norway in 2017.	631
27.2	Illustration of the Gioia data structure template.	633
27.3	Temporal bracketing in reform case.	636
28.1	Eight different research questions which can be addressed by focus group studies.	643
28.2	The four constructs: strategies to ensure trustworthiness in focus group research.	659

Tables

2.1	Basic demographics	<i>page</i> 32
2.2	Annual household income for Mechanical Turk and the US population	33
3.1	A non-exhaustive list of social media companies offering academic APIs	56
3.2	A non-exhaustive list of pre-existing social media data sets	57
5.1	Example research designs with low vs. high degrees of naturalism	94
5.2	Random assignment in within-subjects, between-subjects, and waitlist design	102
11.1	A traditional power table outlining effect size, power, and planned sample size for independent <i>t</i> -tests	242
11.2	Where to find common statistical tests in G*Power menus	243
11.3	Simulation estimation of power for several potential sample sizes and number of measurement days for the gamification of data literacy study	251
13.1	Possible planning and tracking project completion	296
17.1	Comparison of product features across DirectRT, E-Prime, and SuperLab	387
19.1	Sample specimen pros and cons	436
19.2	Cost and ease of collection, transport, and storage	437
19.3	General pros and cons to each approach	442
19.4	Comparisons of pros and cons	445
20.1	12-lead ECG measures for research: both resting and 24-hour Holter	458
22.1	A summary of steps for implementing EMG measurement	500
22.2	Manufacturers of commonly used bioamplifiers used in research settings	503
23.1	Properties of different brain imaging methods relative to EEG	522
23.2	List of common EEG artifacts and strategies to avoid them	527
23.3	Common ERP components	532
24.1	Advantages and disadvantages of using OESQs	551
24.2	Survey design decisions when using open-ended questions	555
24.3	Dummy and nominal codes for gender and sexual orientation	564
25.1	Major texts demonstrating secondary data analysis of Intergenerational Studies data	577

	List of Tables	xv
26.1	Examples of interview questions highlighting varying structures and types	598
27.1	Two templates for qualitative case studies	619
27.2	Five interview genres: purposes and practices	629
27.3	Steps of an analysis	632
27.4	Analyzing data for excessive change	634
28.1	The five different questions that guide focus group discussion	648
28.2	Analyzing group interaction	655

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Preface

The Cambridge Handbook of Research Methods and Statistics for the Social and Behavioral Sciences is meant to be the most comprehensive and contemporary collection of topics related to research methods and statistics spanning these related yet extremely diverse fields of research. This second volume, *Performing Research*, provides researchers a vast array of tools to consider using in their research paradigms. Although each chapter has a separate focus, the chapters build upon one another to provide experienced and novice researchers alike the tools to engage in the highest-quality research possible.

Throughout these chapters, the leading researchers in a variety of disciplines seek to share their knowledge and experience in a way that is both accessible and useful. They do so by writing in a way that is both understandable to novice researchers but also deeply discusses the challenges related to each topic and provides new information to even the most highly experienced scientists. This volume begins with a discussion of the various ways researchers can access participants for quantitative research and the various strengths and weaknesses to each approach. This first part includes a modern discussion of participant pools, organizational-based research, and international research (and everything in-between).

The second part of this volume considers important methodological considerations in the design of the research. This section features in-depth discussions of reliability, validity, power, replication, and doing quality interdisciplinary research (among other topics). The third part pivots to topics that other volumes often presume a familiarity with in all researchers – the proper use of self-report measures. This section covers important considerations in the design of any self-report measure along with the concerns uniquely associated with questionnaire design.

The fourth part of the volume turns the focus to various behavioral measure approaches used by social and behavioral scientists. This section covers eyetracking, implicit, and reaction time-based measures that are incredibly useful for understanding human behavior. The fifth part changes the focus to physiological measures. This section features chapters looking at diverse topics such as EMG, hormones, and fMRI measures with a goal to familiarize the reader with the proper interpretation of these kinds of measures.

The final Part of Volume 2 turns to an explicit focus on qualitative measures. This expansive section considers all manner of qualitative data, from the analysis of open-ended survey items, to case studies, to pure observational data.

In all, these authors span over a dozen disciplines, many more countries, and have led groundbreaking world-class research paradigms. It is for this reason that we are confident in their ability to teach you and to help you progress in your career as a scientist.